Gulfstream™

Gulfstream Aerospace Corporation
1 Product Support Road
Savannah, GA 31407

Date: 06/2/2022
Aircraft Identification: *G450 S/N 4207*
Operator: Palo Alto Venture Fund Advisors, LLC (Solairus)
Aircraft Discrepancy: *ASC 001 88 Parameter Upgrade On Hold*
ATA: *31*

Mr. Ron Crosler
Quality Assurance Manager
Solairus Aviation

This letter is intended to support the request of an exemption for G450 S/N 4207 from 135.152 (j), (a) of Tiltle 14, Code of Federal Regulation (14 CFR) by providing the current parameters recorded by the FDR and the parameters added via ASC 001 to make the DFDR 135.152 compliant.

The Gulfstream G450 S/N 4207 production build included a FDR that records 78 of the parameters required by FAR 135.152. Please refernce the attached table which lists the parameters recorded from production as well as parameters added via ASC 001.

Regards,

Zachary Sprentz
Technical Operations Supervisor
Avionics Electrical
Gulfstream Aerospace Corporation

Parameters	Production	ASC 001
1. Time or Relative Time Counts	✓	
2. Pressure Altitude	✓	
3. Indicated airspeed or Calibrated airspeed	✓	
4. Heading (Primary flight crew reference)	✓	
5. Normal Acceleration (Vertical)	✓	
6. Pitch Attitude	✓	
7. Roll Attitude	✓	
8. Manual Radio Transmitter Keying or CVR/DFDR synchronization reference	✓	
9. Thrust/Power on each engine—primary flight crew reference	✓	
10. Autopilot Engagement	✓	
11. Longitudinal Acceleration	✓	
12a. Pitch control(s) position (nonfly-by-wire systems)		✓
13a. Lateral control position(s) (nonfly-by-wire)		✓
14a. Yaw control position(s) (nonfly-by-wire)		✓
15. Pitch control surface(s) position	✓	
16. Lateral control surface(s) position	✓	
17. Yaw control surface(s) position	✓	
18. Lateral Acceleration	✓	
19. Pitch Trim Surface Position	✓	
20. Trailing Edge Flap or Cockpit Control Selection	✓	
21. Leading Edge Flap or Cockpit Control Selection	✓	
22. Each Thrust reverser Position (or equivalent for propeller airplane)	✓	
23. Ground Spoiler Position or Speed Brake Selection	✓	
24. Outside Air Temperature or Total Air Temperature	✓	
25. Autopilot/Autothrottle/AFCS Mode and Engagement Status	✓	
26. Radio Altitude	✓	
27. Localizer Deviation, MLS Azimuth, or GPS Lateral Deviation	✓	

Parameters	Production	ASC 001
28. Glideslope Deviation, MLS Elevation, or GPS Vertical Deviation	✓	
29. Marker Beacon Passage	✓	
30. Master Warning	✓	
31. Air/ground sensor (primary airplane system reference nose or main gear)	✓	
32. Angle of Attack (If measured directly)	✓	
33. Hydraulic Pressure Low, Each System	✓	
34. Groundspeed	✓	
35. GPWS (ground proximity warning system)	✓	
36. Landing Gear Position or Landing gear cockpit control selection	✓	
37. Drift Angle	✓	
38. Wind Speed and Direction	✓	
39. Latitude and Longitude	✓	
40. Stick shaker and pusher activation	✓	
41. Windshear Detection	✓	
42. Throttle/power lever position	✓	
43. Additional Engine Parameters	✓	
44. Traffic Alert and Collision Avoidance System (TCAS)	✓	
45. DME 1 and 2 Distance	✓	
46. Nav 1 and 2 Selected Frequency	✓	
47. Selected barometric setting	✓	
48. Selected altitude	✓	
49. Selected speed	✓	
50. Selected Mach	✓	
51. Selected vertical speed	✓	
52. Selected heading	✓	
53. Selected flight path	✓	
54. Selected decision height	✓	
55. EFIS display format	✓	
56. Multi-function/Engine Alerts Display format	✓	
57. Thrust comand	✓	

Parameters	Production	ASC 001
58. Thrust target	✓	
59. Fuel quantity in CG trim tank	✓	
60. Primary Navigation System Reference	✓	
61. Ice Detection	✓	
62. Engine warning each engine vibration	✓	
63. Engine warning each engine over temp.	✓	
64. Engine warning each engine oil pressure low	✓	
65. Engine warning each engine over speed	✓	
66. Yaw Trim Surface Position	✓	
67. Roll Trim Surface Position		✓
68. Brake Pressure (left and right)	✓	
69. Brake Pedal Application (left and right)		✓
70. Yaw or sideslip angle	✓	
71. Engine bleed valve position	✓	
72. De-icing or anti-icing system selection	✓	
73. Computed center of gravity	✓	
74. AC electrical bus status	✓	
75. DC electrical bus status	✓	
76. APU bleed valve position	✓	
77. Hydraulic Pressure (each system)	✓	
78. Loss of cabin pressure	✓	
79. Computer failure (critical flight and engine control systems)	✓	
80. Heads-up display (when an information source is installed)	✓	
81. Para-visual display (when an information source is installed)	✓	
82. Cockpit trim control input position—pitch		✓
83. Cockpit trim control input position—roll		✓
84. Cockpit trim control input position—yaw		✓
85. Trailing edge flap and cockpit flap control position	✓	
86. Leading edge flap and cockpit flap control position	✓	
87. Ground spoiler position and speed brake selection		✓
88. All cockpit flight control input forces (control wheel, control column, rudder pedal)		✓